

Abstract

The present invention provides tagged acyl phosphate probes ("TAPPs"), and methods of their preparation and use. The subject methods and compositions can provide enhanced simplicity and accuracy in identifying changes in the presence, amount, or activity of target proteins in a complex protein mixture, preferably nucleotide binding proteins using nucleotide binding protein-directed TAPPs. The profiling methods described herein can have a number of steps leading to the identification of target nucleotide binding protein(s) in a complex protein mixture.